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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/774,303	02/06/2004	Gary Steven Strong	SC 082	5404

7590 02/28/2006

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EXAMINER

JOERGER, KAITLIN S

ART UNIT	PAPER NUMBER
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3653

DATE MAILED: 02/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/774,303	STRONG ET AL.	
	Examiner	Art Unit	
	Kaitlin S. Joerger	3653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 and 21-31 is/are rejected.
- 7) ☒ Claim(s) 20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10/26, 8/2</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION***Drawings***

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 821, 822c, 880, 830c and 830d. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "882a" has been used to designate both the flattened bladder and brackets, see pages 18 and 19 of the specification. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the

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applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character “882b” has been used to designate both the inflated bladder and side walls, see specification pages 18 and 19. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the two edge hooks, as claimed in claim 17 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and

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where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-18 and 31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In the seventh paragraph of claim 1, starting with lines 14, the applicant claims that the screening material has spaced apart holes, each hole having a part of one of the deck pins therein. This statement is confusing, as the figures and specification show that the deck pins is received in holes located in the edges of the screen assembly, not in the holes of the screening material. It is understood by the examiner that the holed of the screening material are for allowing material to pass therethrough, and not for holding the screening material in the basket in cooperation with the deck pins.

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In the 11th and 12th lines of claim 31, the applicant claims that the screening material has spaced apart holes, each hole having a part of one of the deck pins therein. This statement is confusing, as the figures and specification show that the deck pins is received in holes located in the edges of the screen assembly, not in the holes of the screening material. It is understood by the examiner that the holed of the screening material are for allowing material to pass therethrough, and not for holding the screening material in the basket in cooperation with the deck pins.

Claims 5-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 5 recites the limitation "the two side ledges" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 5 recites the limitation "said edge" in line 5. There is insufficient antecedent basis for this limitation in the claim.

Claim 28 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The applicant claims that the movable members of the holding system are from a group consisting of inflatable bladders *and* side rails. However, the application does not this teach feature. The specification and drawings show two embodiments one where the holding system uses inflatable bladders and one where the holding system uses movable

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rails. There is no teaching of a holding system that uses a combination of inflatable bladders and rails. If the applicant is trying to claim both embodiments claim 28 should be written in the alternative.

Claim 13 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The applicant claims that the fluid under pressure of the power apparatus is from a group consisting of gas *and* hydraulic fluid. However, the application does not teach this feature. The specification discusses two embodiments one where the power apparatus uses gas and one where the power apparatus uses hydraulic fluid. There is no teaching of a power apparatus that uses a combination of gas and hydraulic fluid. If the applicant is trying to claim both embodiments claim 13 should be written in the alternative.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, 14, 25, and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Boccabella et al. (US 5,816,413).

The '413 patent teaches a vibratory separator, 11, comprising: a basket, a collection receptacle, a deck, 13, 15, and 17, for mounting a screen assembly, the deck

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having a plurality of deck pins, 91, projecting upwardly therefrom, a screen assembly, see figure 3, on the deck, comprising screening material with a plurality of openings, the screen having a plurality of holes, 89, for receiving the deck pins, a vibratory apparatus, see column 3, lines 52+, connected to the assembly, and a holding apparatus, see column 4, lines 39+, for holding the screen assembly on the deck. The vibratory separator is a shale shaker.

The '413 patent further teaches that the deck pins in inclined toward an interior of the basket and the holding apparatus includes two spaced-apart side members, 20, which push down on an edge of the screen assembly.

Claims 19, 21, 22, 23, and 27-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Cole (US 4,040,951).

The '951 patent teaches a holding system for holding a screen assembly on a deck of a vibratory separator, the separator having two spaced apart sides, 110, between which the screen assembly is held, the deck including two side supports for supporting sides of the screen assembly, each support having an inclined upper surface, see figure 4. The holding system comprises two spaced-apart rails, each rail selectively movable downwardly to hold an edge of the screen assembly against an upper surface of a side support, see figure 4. The rails hold the screen assembly in contact with the deck and the downward force of the rails tensions the screening material of the assembly, see figure 4 and column 4, line 34 through column 5, line 43.

Further, the '951 patent teaches a method for holding a screen assembly in a vibratory separator, the method comprising installing a screen on a deck of a vibratory

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separator, the vibratory separator having two sides and two side supports, each side support having an upper inclined surface, and holding the screen assembly in place with a holding apparatus, the holding apparatus comprising a holding system for holding the screen assembly, the system comprising to movable members located on the side of the vibratory separator, each movable member selectively movable to hold an edge of the screen assembly against an upper inclined surface of a support. The movable members are rails and seal against a top surface of the screen assembly and they serve to bend the screen assembly thereby tensioning the screening material, see figure 4 and column 5, lines 1+.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Boccabella et al. (US 5,816,413) in view of Carr (US 6,202,856).

The '413 patent does not teach that the screening material comprises a plurality of layers of screen mesh. However, it is well known in the art to construct a screen material comprised of several layers of mesh, as taught by the '856 patent.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to construct a screening assembly that is comprised of multiple

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layers of in order to screen out even finer particles from a fluid flow than would be capable with just a single layer screen assembly.

Claims 4, 5, 6, 8, 9 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boccabella et al. (US 5,816,413) in view of Cole (US 4,040,951).

The '413 patent teaches all of the features of the claimed apparatus including two spaced-apart rails, 20, and side ledges that comprise the holding apparatus. However, the rails of the '413 patent are not taught to be movable and the side ledges are not inclined. The '951 patent teaches a screening apparatus comprising a screening deck and spaced-apart rails, each rail positioned movably above one of the two inclined side ledges, each rail selectively movable downwardly to abut an edge of the screen assembly and to push said edge against the upper surface of the side ledge, and a selectively movable movement apparatus powered by a power apparatus, 124 and 126, for moving the rails, see figure 4, and column 4, line 34 through column 5, line 43. The deck of the '951 patent further includes a curved support so that the screen is held in a crowned shape.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the immovable rails of the '413 patent with the movable rail system of the '951 patent, in order to enable easy replacement of the screen assembly when it became worn by enabling the holding means to be easily and readily separated from the screen assembly.

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Claim 10, 12, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boccabella et al. (US 5,816,413) in view of Cole (4,040,951) as applied to claim 9 above, and further in view of Lane et al. (US 6,283,303)

The '951 patent teaches a power apparatus, 124 and 126, for moving the movable apparatus, however, it does not teach that the power apparatus includes a plurality of movable pistons. The '303 patent teaches a vibrating screen apparatus with a holding apparatus that includes a movement apparatus that is moved by a power apparatus. The power apparatus includes pistons, 60, with a lower end connected to a rail, 56, see figures 4 and 5. The piston is a standard piston that is powered by fluid under pressure, wherein the fluid is a gas.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the power apparatus of the '951 patent with the power apparatus, including the pistons, of the '303 patent in order to make the clamping and unclamping of the screen easier to accomplish as the pistons do not rely on the strength of a manual operator.

Claims 15, 16, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boccabella et al. (US 5,816,413) in view of Burnett (6,938,779).

The '413 patent teaches all of the features of the claimed including a holding system comprised of two rails, 20. The holding system of the invention taught in the '413 patent does not teach a bladder system with an inflatable bladder apparatus. The '779 patent teaches a vibratory separator with a screen assembly and a holding apparatus

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that includes a bladder system, see figures 2A, 2B, and 3. The bladder system pushes down on the edges of the screen assembly to hold the screen assembly on a deck. The bladder directly contacts the deck providing a seal between the lower surface of the bladder and the upper surface of the screen assembly.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace holding system of the '413 patent with the bladder system of the '779 patent, in order to enable easy replacement of the screen assembly when it became worn by enabling the holding means to be easily and readily separated from the screen assembly.

Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cole (US 4,404,951) in view of Boccabella et al. (5,816,413).

The '951 patent teaches all of the aspects of the claimed invention except for a holding system that include deck pins inserted into holes in the bottom of the screen assembly. The '413 patent teaches a screening apparatus with the screen assembly holding system that includes deck pins, 91, that project upwardly and positionable in corresponding screen holes located on the screen assembly.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the deck pins and corresponding holes of the holding system taught by the '413 patents in the screen apparatus and holding system taught by the '951 patent in order to better prevent the screen assembly from moving, especially sliding along the top of the deck, during operation of the vibratory separating apparatus.

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Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Boccabella et al. (US 5,816,413).

The '413 patent does not specifically teach a method for processing material with a vibratory separator, however, the apparatus of the '413 patent would obviously perform the method steps of claim 31.

Specifically the reference teaches introducing material to be processed to a vibratory separator, the vibratory separator comprising a basket, a collection receptacle beneath the basket, a deck on the basket, 13, 15, and 17, for mounting a screen assembly thereon, the deck having a deck pin, 91, projecting upwardly therefrom, and the screen assembly comprising screening material, the screen material having a plurality of opening therethrough, the screening assembly having screen holes, 89, for receiving part of the deck pin, vibratory apparatus connected to the separator for vibrating the screen assembly, see column 3, lines 52+, holding apparatus for holding the assembly on the deck, see column 4, lines 39+, and separating components of the material with the screen assembly.

While the '413 patent does not specifically teach a method for processing material with a vibratory separator it would have been obvious to one of ordinary skill in the art at the time the invention was made to perform the method step of claim 31 when using the apparatus taught by the '413 patent in its usual and expected fashion as the patent teaches a vibratory separator that performs all of the steps of the claimed method.

Allowable Subject Matter

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Claims 7 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: Claims 7 and 20 claim that the deck pins project through the screen assembly and into holes located on the movable rails. The deck pins of the prior art project into the screen assembly, however, there is not teaching of decks pins pass through the assembly into hold down rails. Therefore, the examiner has found this feature to be un-obvious in view of the prior art and claims 7 and 20 therefore contain allowable subject matter.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kaitlin S. Joerger whose telephone number is 571-272-6938. The examiner can normally be reached on Monday - Friday 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen Lillis can be reached on 571-272-6928. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ksj


10 February 2006


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